

REMARKS

Claims 1-4 are pending in this application, of which claim 1 has been amended. No new claims have been added.

In the Office Action of December 10, 2002, claims 1-4 were rejected under 35 USC §103(a) as unpatentable over **Shiga et al.** (previously applied) in view of U.S. Patent 4,794,898 to Kato (hereinafter "**Kato**").

Applicants respectfully traverse this rejection.

The Examiner has admitted that **Shiga et al.** fails to disclose the engine revolution controlling means arranged to decrease the revolution of the engine when the deviation of the conduction rate from the target rate is positive and increase the same when negative, but has cited **Kato** for teaching this feature.

Kato discloses an apparatus for engine idle speed contained in a battery charging system for an automobile. The conduction rate of a switching circuit which controls field current of the generator is detected, while engine speed is also detected. Since the conduction rate represents the actual amount of electricity generated by the generator, the conduction rate as well as engine speed is used to determine optimal engine idle speed. To this end desired conduction rate values for various engine speeds within idle speed range are prestored in a memory, and a desired conduction rate is read out using detected engine speed so that a detected conduction rate will be compared with the desired conduction rate. Using the result of comparison, idle speed is either increased or decreased so that the actual conduction rate approaches the desired conduction rate.

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In one embodiment, the generator is disabled when the actual conduction rate is greater than the desired conduction rate in order to prevent engine stall.

Kato and **Shiga et al.** both fail to teach, mention or suggest a target voltage setting means for setting the target reference level to be low when the detected speed is low and to be high when the detected speed is high so that the voltage input of the inverter shows a stabilized positive characteristic to the detected speed, as in the present invention.

In particular, Fig. 53 does not show that a rate of change of the speed of the engine is greater at an increase than at a decrease thereof.

Accordingly, claim 1 has been amended to clarify this distinction.

Thus, the 35 USC §103(a) rejection should be withdrawn.

In view of the aforementioned amendments and accompanying remarks, claims 1-4, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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PATENT TRADEMARK OFFICE

Enclosure: RCE

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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Currently Amended): ~~[[A]]~~ An inverter controlled generator set having a converter composed of semiconductor rectifying devices for rectifying the power output of a magnetic generator ~~and an inverter for converting a direct current output of the converter into an alternating current form of a particular frequency~~, comprising:

a semiconductor rectifying device driving means for controlling the conduction of the semiconductor rectifying devices to maintain the voltage output of the converter at a target voltage level, wherein the target voltage level is a target reference level to stabilize the voltage output of the converter;

an inverter for converting a direct current output of the converter into an alternating current form at a particular frequency;

a speed detecting means for detecting the speed of the magnetic generator; and

a target voltage setting means for ~~determining~~ setting the target ~~voltage reference~~ level to be low when the detected speed is low and to be high when the detected speed is high so that the ~~target voltage level shows a~~ input of the inverter shows a stabilized positive characteristic to the detected speed.

Claim 2 (Currently Amended): ~~[[A]]~~ An inverter controlled generator set ~~having an inverter~~ according to claim 1, further comprising:

a conduction rate detecting means for detecting the conduction rate of the semiconductor rectifying devices; and

an engine speed controlling means for controlling the speed of an engine to drive the generator so that the conduction rate is converged on a predetermined target rate, wherein

the controlling of the speed of the engine is implemented by adjusting the supply of fuel to the engine.

Claim 3 (Currently Amended): ~~[[A]]~~ An inverter controlled generator set ~~having an inverter~~ according to claim 2, wherein the engine speed controlling means is arranged to decrease the speed of the engine when the deviation of the conduction rate from the target rate is positive and increase the same when negative.

Claim 4 (Currently Amended): ~~[[A]]~~ An inverter controlled generator set ~~having an inverter~~ according to claim 3, wherein a rate of change of the speed of the engine is greater at an increase than at a decrease thereof.